

# BP Cherry Point Refinery NPDES Permit Public Meeting and Hearing

Industrial Section June 2, 2011

## Agenda

6:30 Introduction

6:35 Presentation

7:00 Question and answer session, followed by public hearing



#### Introduction

#### **Ecology Staff:**

- Liem Nguyen, Industrial Section Permit Writer and Facility Engineer
- Kim Wigfield, Industrial Section Unit Supervisor
- Garin Schrieve, Industrial Section Manager
- David Zink, Public Hearing Officer



## Tonight's Purpose

- Provide overview of BP facility and wastewater
- Describe wastewater discharge permits
- Provide information on conditions in proposed permit
- Learn about opportunities for public comment
- Answer your questions
- Accept formal comments



# Location of BP Refinery



## **BP** Facility

- Active petroleum refinery processes crude oil to make gasoline, jet fuel, diesel fuel, and fuel oil.
- Constructed in 1971. Approximately 800 employees.
- Refines average of 209,000 barrels of crude a day.
- Discharges 2.8 to 6.4 million gallons of wastewater per day.
- Facility includes process units, storage tanks, wastewater treatment plant, buildings, contractor laydown areas, and dock.



## Overview map of BP Refinery



#### BP's Wastewater

- 3 types of wastewater process water, stormwater, and oily ballast water.
- Process water, oily stormwater, and oily ballast water are treated at the wastewater treatment plant.
- Wastewater treatment plant includes physical and biological treatment.
- Physical treatment consists of settling and skimming to separate oil and water. Recovered oil is recycled back into the refining process.

#### BP's Wastewater Cont'd

- Biological treatment uses bacteria to break down oily water. Solids are settled out in large ponds.
- Non-oily stormwater is treated in stormwater pond or in natural swales.
- Treated process water and stormwater is discharged to Strait of Georgia.
- 5 stormwater outfalls discharge to ditches along Grandview and Jackson Roads and eventually to Terrell Creek.



#### Principles of Permit Program

- A permit is required to discharge wastewater to waters of the state.
- Permits shall limit the amount of pollutants discharged.
- Wastewater must be treated with best technology economically achievable, even if receiving water quality is not threatened.
- Discharge limits are technology-based but more stringent limits may be required if necessary to protect receiving water quality.

## Wastewater Discharge Permits

- Normally issued every 5 years
- Sets limits on kinds, amounts, and concentrations of pollutants a facility may discharge
- Requires sampling, recordkeeping, and reporting
- Establishes operating conditions
- Requires special studies
- Applies pollution control standards



#### BP's Permit

- Renews most conditions from current permit.
- Requires limits and monitoring for treated process water and monitoring for stormwater.
- Includes:
  - Acute and chronic bioassays
  - Sediment monitoring
  - Pollution prevention
  - Dioxin study
- Requires BP to notify Ecology of any noncompliance and changes to facility.



#### BP's Permit Cont'd

#### Proposed changes and new requirements:

- 4 new stormwater outfalls
- Additional stormwater monitoring
- Priority pollutant testing
- Facility loading criteria
- Herring toxicity testing
- Construction stormwater requirements
- Groundwater monitoring



## Herring Toxicity Testing

- Cherry Point herring are in severe decline.
- Concern that industrial discharges are causing or contributing to the decline.
- Proposed permit requires testing to expose herring embryos and larvae to BP's wastewater and measure their responses.
- Testing will measure acute and chronic toxicity.



#### Construction Stormwater

- Authorizes discharge of stormwater from construction activities.
- Requires Stormwater Pollution Prevention Plans.
- Requires best management practices.
- Requires site inspections, monitoring, reporting, and recordkeeping.
- Establishes benchmarks and corrective action.



## Groundwater Monitoring

- Monitoring wells are located in wastewater treatment plant.
- Well data shows elevated levels of sulfate and chloride.
- Higher levels possibly due to leakage from unlined settling ponds.
- Proposed permit requires installation of an additional well and continued monitoring.

#### **Public Comment**

- Opportunity to voice opinions on the terms and conditions of the proposed BP permit.
- Comment period ends at 5:00 pm June 13, 2011.
- Submit comments in writing by regular mail, fax, or e-mail.
- Provide formal comments at public hearing tonight.



## Next Steps

- Review and evaluate all comments.
- Complete Response to Comments.
- Make a final decision.
- Send Response to Comments and final decision to commenters.



## Web Page

Documents and information are posted on Ecology's webpages:

http://apps.ecy.wa.gov/industrial/proposed.asp

http://www.ecy.wa.gov/programs/swfa/industrial/oil\_bp.html



#### Questions?

- Liem Nguyen, Industrial Section permit writer and facility engineer (360) 407-6955, liem.nguyen@ecy.wa.gov
- Kim Wigfield, Industrial Section unit supervisor (360) 407-6931, kim.wigfield@ecy.wa.gov

#### Please send comments by 5:00 pm June 13, 2011 to:

Liem Nguyen

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IScommentsBP@ecy.wa.gov



## Public Hearing

#### David Zink, Hearing Officer

#### Please send comments by 5:00 pm June 13, 2011 to:

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